## **AMENDMENTS TO THE CLAIMS**

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1. (Currently Amended) A method of populating a knowledge base, the method comprising:

creating, on at least one hardware server in a computing system, at least one claim element based on information related to a field from a claim form for an insurance provider, the at least one claim element comprising a reference claim element;

wherein the at least one claim element comprises at least one edit deduced from the information related to the field from the claim form, an edit comprising a directive of an insurance provider to correct or reject an insurance claim under specified circumstances;

applying at least one knowledge-base-population rule to the at least one edit said at least one claim element to form claim-processing knowledge for the at least one claim element; and

wherein the application comprises determining a match between a pattern of the at least one edit and a pattern of the at least one knowledge-base-population rule;

wherein the claim-processing knowledge comprises one or more conclusions specified by the at least one knowledge-base-population rule based on the determined match;

populating the knowledge base with said claim-processing knowledge acquired from said <u>application</u> applying step, the knowledge base being resident in a computer-readable storage medium in <u>a</u> the computing system; [[.]]

wherein the population comprises at least one of creating and updating an instance of the at least one claim element with the claim-processing knowledge; and

wherein the creating, the performing, and the populating are performed via at least one computer in the computing system comprising a processor and memory.

2. (Currently Amended) The method of claim 1, further comprising translating an edit to yield a translated edit, the translated edit being utilized in the step of creating the at least one claim element, the at least one edit comprising the translated edit.

3. (Currently Amended) The method according to claim 1, further comprising binding at least one conclusion variable of the at least one knowledge-base-population rule responsive to the <u>application of the at least one knowledge-base-population rule applying step</u>.

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4. (Currently Amended) The method according to claim 3, wherein the step <u>creation</u> of <u>creating</u> the at least one claim element comprises:

creating at least one attribute; and assigning at least one value to said at least one attribute.

- 5. (Original) The method according to claim 1, further comprising validating a claim using appropriate claim-element knowledge in the populated knowledge base.
- 6. (Currently Amended) The method according to claim 1, wherein the step creation of creating the at least one claim element comprises the steps of:

creating at least one reference claim element; and creating at least one reported claim element.

- 7. (Currently Amended) The method according to claim 6, further comprising the step of validating a claim by comparing said at least one reported claim element to said at least one reference claim element.
- 8. (Currently Amended) The method according to claim 2, further comprising the step of verifying that the translated edit has been correctly translated.
- 9. (Currently Amended) An article of manufacture for populating a knowledge base used in validating medical claims, the article of manufacture comprising:

at least one computer readable medium;

processor instructions included on the at least one computer readable medium, the processor instructions configured to be readable from the at least one computer readable medium by at least one processor and thereby cause the at least one processor to operate as to:

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create at least one claim element based on information related to a field from a claim form for an insurance provider, the at least one claim element comprising a reference claim element;

wherein the at least one claim element comprises at least one edit deduced from the information related to the field from the claim form, an edit comprising a directive of an insurance provider to correct or reject an insurance claim under specified circumstances;

apply at least one knowledge-base-population rule to the at least one edit said at least one claim element to form claim-processing knowledge for the at least one claim element; and

wherein the application comprises a determination of a match between a pattern of the at least one edit and a pattern of the at least one knowledge-base-population rule; wherein the claim-processing knowledge comprises one or more conclusions specified by the at least one knowledge-base-population rule based on the determined match;

populate the knowledge base with said claim-processing knowledge acquired from said <u>application</u>; and <u>applying step.</u>

wherein the population comprises at least one of creating and updating an instance of the at least one claim element with the claim-processing knowledge.

10. (Currently Amended) The article of manufacture of claim 9, further comprising processor instructions configured to cause the at least one processor to operate as to translate an edit to yield a translated edit, the translated edit being utilized in the step of creating the at least one claim element, the at least one edit comprising the translated edit.

- 11. (Previously Presented) The article of manufacture of claim 9, further comprising processor instructions configured to cause the at least one processor to operate as to create at least one attribute and to assign at least one value to said at least one attribute.
- 12. (Currently Amended) The article of manufacture of claim 9, wherein the creation of the at least one claim element comprises:

creating at least one reference claim element; and creating at least one reported claim element

- 13. (Original) The article of manufacture of claim 9, further comprising processor instructions configured to cause the at least one processor to operate as to validate a claim using appropriate claim-element knowledge in the populated knowledge base.
- 14. (Original) The article of manufacture of claim 10, further comprising processor instructions configured to cause the at least one processor to operate as to verify whether the translated edit has been correctly translated.

## 15-22. (Canceled)

23. (Previously Presented) The method of claim 1, wherein the at least one claim element includes a plurality of edits, the plurality of edits representing situations that hinder claim payment by a payer.

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- 24. (Currently Amended) The method of claim 23, wherein the applying step comprises applying the <u>at least one</u> knowledge-base-population rule to at least one of the plurality of edits to acquire the claim-processing knowledge.
- 25. (Previously Presented) The method of claim 23, wherein the plurality of edits comprises a plurality of translated edits, wherein at least one translated edit in the plurality of translated edits represents at least a portion of an edit in a syntactical form that facilitates application of a knowledge-base-population rule applied thereto.
- 26. (Previously Presented) The article of manufacture of claim 11, wherein the at least one claim element includes a plurality of edits, the plurality of edits representing situations that hinder claim payment by a payer.
- 27. (Previously Presented) The article of manufacture of claim 26, wherein the application of the knowledge-base-population rule comprises application of the at least one knowledge-base-population rule to at least one of the plurality of edits to acquire the claim-processing knowledge.
- 28. (Previously Presented) The article of manufacture of claim 26, wherein the plurality of edits comprises a plurality of translated edits, wherein at least one translated edit in the plurality of translated edits represents at least a portion of an edit in a syntactical form that facilitates application of a knowledge-base-population rule applied thereto.
  - 29. (Currently Amended) A method comprising:

creating, on at least one hardware server in a computing system, a plurality of claim elements based on a plurality of fields from a plurality of claim forms, the plurality of claim elements comprising a plurality of edits, the plurality of edits representing one or more situations that hinder claim payment by a payer;

for each of the plurality of claim elements, applying one or more knowledge-basepopulation rules for a knowledge base to at least some of the plurality of edits to form claimprocessing knowledge for the plurality of claim elements; and

populating the knowledge base with the claim-processing knowledge acquired from the applying step, the knowledge base being resident in a computer-readable storage medium in <u>a</u> the computing system; [[.]]

wherein the creating, the performing, and the populating are performed via at least one computer in the computing system comprising a processor and memory.

30. (Previously Presented) The method of claim 29, wherein the plurality of edits comprises a plurality of translated edits, wherein at least one translated edit in the plurality of translated edits represents at least a portion of an edit in a syntactical form that facilitates application of a knowledge-base-population rule applied thereto.